

WHAT IS CLAIMED IS:

1. A damper mechanism comprising:

a first rotating member;

a second rotating member being configured to rotate relative to said first rotating

5 member;

a pair of first elastic members, said first elastic members being aligned in a rotational direction to operate in series with each other in said rotational direction; and

a second elastic member being configured to operate in parallel with said pair of first elastic members in said rotational direction, said second elastic member being configured to

10 be compressed in said rotational direction after said pair of first elastic members is compressed to a first angle due to relative rotation of said first rotating member and said second rotating member.

2. The damper mechanism according to claim 1, wherein said second elastic

15 member and said pair of first elastic members are aligned in said rotational direction.

3. The damper mechanism according to claim 2, wherein a plurality of said pair of first elastic members is provided, and a plurality of said second elastic members is placed between said plurality of pairs of first elastic members in said rotational direction.

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4. The damper mechanism according to claim 3, wherein said second elastic member is placed in a radial position to overlap with the radial position of said first elastic members.

5. The damper mechanism according to claim 4, wherein said second elastic member is placed in the same radial position as that of said first elastic members.

6. The damper mechanism according to claim 5, further comprising a supporting member arranged between one elastic member of said pair of first elastic members and the other elastic member of said pair of first elastic members in said rotational direction, said supporting member being configured to contact rotational ends of said pair of first elastic members.

7. The damper mechanism according to claim 2, wherein said second elastic member is placed in a radial position to overlaps with the radial position of said first elastic members.

8. The damper mechanism according to claim 7, wherein said second elastic member is placed in the same radial position as that of said first elastic members.

9. The damper mechanism according to claim 1, further comprising a supporting member arranged between one elastic member of said pair of first elastic members and the other elastic member of said pair of first elastic members in said rotational direction, said supporting member being configured to contact rotational ends of said pair of first elastic members.

10. The damper mechanism according to claim 1, further comprising a third elastic member being configured to operate in parallel with said pair of first elastic members

and said second elastic member in said rotational direction, said third elastic member being configured to be compressed in said rotational direction after said pair of first elastic members is compressed to a first angle and said second elastic member is compressed to a second angle due to relative rotation of said first rotating member and said second rotating member.

11. The damper mechanism according to claim 10, further comprising a stopper mechanism that stops relative rotation of said first and second rotating member at a third angle.

12. The damper mechanism according to claim 11, wherein said second angle is larger than said first angle, and said third angle is larger than said second angle.

13. A damper disk assembly comprising:

a first disk member having first and second supporting parts arranged in a rotational direction;

a second disk member being arranged on an axial side of said first disk member, said second disk member having first and second supporting areas corresponding to said first and second supporting parts respectively;

a pair of first elastic members being arranged inside said first supporting part and first supporting area, said pair of elastic members being aligned in said rotational direction to operate in series with each other in said rotational direction; and

a second elastic member being arranged inside said second supporting part and said second supporting area, said second elastic member being configured to operate in parallel

with said pair of first elastic members in said rotational direction after said first elastic member is compressed to a first angle due to relative rotation of said first and second disk members.

5 14. The damper disk assembly according to claim 13, wherein said second elastic member and said pair of first elastic members are aligned in said rotational direction.

 15. The damper disk assembly according to claim 13, wherein a plurality of said pair of first elastic members is provided, and a plurality of said second elastic members is
10 placed between said plurality of pairs of first elastic members in said rotational direction.

 16. The damper disk assembly according to claim 15, wherein said second elastic member is placed in a radial position to overlap with the radial position of said first elastic members.

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 17. The damper disk assembly according to claim 16, wherein said second elastic member is placed in the same radial position as that of said first elastic members.

 18. The damper disk assembly according to claim 13, further comprising ~~further~~
20 ~~comprising~~ a supporting member arranged between one elastic member of said pair of first elastic members and the other elastic member of said pair of first elastic members in said rotational direction, said supporting member being configured to contact rotational ends of said pair of first elastic members.

19. The damper disk assembly according to claim 13, wherein a first rotational direction gap of a certain angle is secured between a rotational direction end of said second supporting part on one rotational side and a rotational direction end of said second elastic member.

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20. The damper disk assembly according to claim 19, further comprising a third elastic member being arranged in a third supporting part of said first disk member and a third supporting area of said second disk member, wherein

a second rotational direction gap is secured between a rotational direction end of said third supporting area on one rotational side and a rotational direction end of said third elastic member.

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